PTO/SB/05 (03-01)

Please type a plus sign (+) inside this box

Approved for use through 10/31/2002 OMB 0651-0032

Please type a plus sign (+) inside this box — I+I

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. 4348US (MUEI-0547.00/US) James J. Howarth First Inventor METHOD OF BALL GRID ARRAY (BGA) ALIGNMENT, METHOD OF TESTING,

< '''	10MITTAL	Title Alignment apparatus and semiconductor device assembly					
Only for new nonprovision	al applications under 37 CFR 1.53(b))	Express Mail Label No. EL740536048US					
APPLICATION APPLICATION	FION ELEMENTS erning utility patent application contents.	ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231					
1. X Fee Transmittal For (Submut an original and a d d Applicant claims sr See 37 CFR 1.27. 3. X Specification (preferred arrangement - Descriptive title - Cross Reference - Statement Regal - Reference to set or a computer por - Background of 1 - Brief Summary - Brief Description - Detailed Description - Detailed Description - Claim(s) - Abstract of the 4. X Drawing(s) (35 U. 5. Oath or Declaration a. X Newly execution (for continual in DELET)	orm (e.g., PTO/SB/17) uplicate for fee processing) mall entity status. [Total Pages 23] set forth below) of the invention to Related Applications riding Fed sponsored R & D quence listing, a table, rogram listing appendix the Invention of the Invention of the Drawings (if filed) oftion Disclosure S.C. 113) [Total Sheets 4] [Total Pages 1] ted (original or copy) prior application (37 CFR 1.63 (d)) tion/divisional with Box 18 completed) ON OF INVENTOR(S)	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement (when there is an assignee) 11. English Translation Document (if applicable) 12. Information Disclosure Statement (IDS)/PTO-1449 13. Preliminary Amendment 14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed)					
named in t 1.63(d)(2)	ternent attached deleting inventor(s) he prior application, see 37 CFR and 1.33(b). Sheet. See 37 CFR 1.76	Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. Other:					
or in an Application Data She Continuation Prior application information For CONTINUATION OR DIVISION Box 5b, is considered a part of	Divisional Continuation-in-part (CIP) Examiner ONAL APPS only: The entire disclosure of the disclosure continuation has been inadvirule.	of prior application No					
	19. CORRESPOND						
X Customer Number or Bar Co	(Insert Child Hill III III III III III III III III III	or Correspondence address below					
Name	24247 PATENT TRADEMARK OF	FICE					
Address		Clate Tip Code					
City		State Zip Code					
Country	Te	lephone Fax					
Name (Print/Type)	Bradley B. Jensen	Registration No. (Attorney/Agent) 46,801					
Signature	R. (R)	Date 08/30/01					

Burden Hour Statement. This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FE	E	TR	AN	SN	IIT	TA	L
	f	or	FY	20	01		

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$)	1546.	00

Complete if Known					
Application Number	Not yet assigned				
Filing Date	August 30, 2001				
First Named Inventor	James J. Howarth				
Examiner Name	Unknown				
Group Art Unit	Unknown				
Attorney Docket No.	4348US (MUET-0547 00/US)				

METHOD OF PAYMENT	FEE CALCULATION (continued)							
1. X The Commissioner is hereby authorized to charge indicated foce and gradit any examplements to:			3. ADDITIONAL FEES					
indicated fees and credit any overpayments to: Deposit		Larg	е	Sma	II			
Account	F	Entit	•	Entit	•			
Number 20-1469 Deposit	Fee Cod		Fee Code	Fee (\$)	Fee Description	Fee Paid		
Account Name TraskBritt, P.C.	105	130	205	65	Surcharge - late filing fee or oath			
Charge Any Additional Fee Required Under 37 CFR 1 16 and 1 17	127	50	227	25	Surcharge - late provisional filing fee or cover sheet			
Applicant claims small entity status	139	130	139	130	Non-English specification			
See 37 CFR 1.27 2. X Payment Enclosed:	147	2,520	147	2,520	For filing a request for ex parte reexamination			
Y Check Credit card Money Cothor	112	920*	112	920*	Requesting publication of SIR prior to Examiner action			
FEE CALCULATION	113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action			
1. BASIC FILING FEE	115	110	215	55	Extension for reply within first month			
Large Entity Small Entity	116	390	216	195	Extension for reply within second month			
Fee Fee Fee Fee Description	117	890	217	445	Extension for reply within third month			
101 710 201 255 Hills Sing for	118	1,390	218	695	Extension for reply within fourth month			
106 320 206 160 Design filing fee 710	128	1,890	228	945	Extension for reply within fifth month			
107 490 207 245 Plant filing fee 0	119	310	219	155	Notice of Appeal			
108 710 208 355 Reissue filing fee 0	120	310	220	155	Filing a brief in support of an appeal			
114 150 214 75 Provisional filling fee	121	270	221	135	Request for oral hearing			
		1,510	138	1,510	Petition to institute a public use proceeding			
SUBTOTAL (1) (\$) 710.00	140	110	240	55	Petition to revive - unavoidable			
2. EXTRA CLAIM FEES	141	1,240	241	620	Petition to revive - unintentional			
Fee from Extra Claims below Fee Paid	142	1,240	242	620	Utility issue fee (or reissue)			
Total Claims 62 -20** = 42 X 18 = 756	143	440	243	220	Design issue fee			
Independent	144	600	244	300	Plant issue fee			
Multiple Dependent 0 = 0	122	130	122	130	Petitions to the Commissioner			
	123	50	123	50	Processing fee under 37 CFR 1.17(q)			
Large Entity Small Entity Fee Fee Fee Fee Fee Description	126	180	126	180	Submission of Information Disclosure Stmt			
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	581	40	581	40	Recording each patent assignment per property (times number of properties)			
102 80 202 40 Independent claims in excess of 3	146	710	246	355	Filing a submission after final rejection			
104 270 204 135 Multiple dependent claim, if not paid	440	740	240	255	(37 CFR § 1.129(a))			
109 80 209 40 ** Reissue independent claims over original patent	149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))			
110 18 210 9 ** Reissue claims in excess of 20	179	710	279	355	Request for Continued Examination (RCE)			
and over original patent	169	900	169	900	Request for expedited examination of a design application			
SUBTOTAL (2) (\$) 836.00	Othe	r fee (s	specify	/)				
**or number previously paid, if greater; For Reissues, see above	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)							

SUBMITTED BY Complete (if applicable)						
Name (Print/Type)	Bradley ,B.	Jensen	Registration No. (Attorney/Agent)	46,801	Telephone	801-532-1922
Signature	Broke	BA			Date	08/30/2001

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.